Amendments to the Specification:

Please replace paragraphs [0007], [0008], [0009], [0017], [0022] and [0023] with the following amended paragraphs:

[0007] A first aspect of the present invention is an integrated circuit comprising: a first voltage island having a ~~hierarchal~~ hierarchical structure; and a second voltage island nested within the first voltage island, the second voltage island having the same ~~hierarchal~~ hierarchical structure as the first voltage island.

[0008] A second aspect of the present invention is an integrated circuit comprising: a parent terrain; and a ~~hierarchal~~ hierarchical order of nested voltage islands within the parent terrain, each higher-order voltage island nested within a lower-order voltage island, each nested voltage island having the same ~~hierarchal~~ hierarchical structure.

[0009] A third aspect of the present invention is a method of designing an integrated circuit comprising: providing a parent terrain within the integrated circuit; placing a first voltage island having a ~~hierarchal~~ hierarchical structure within the parent terrain; and placing a second voltage island nested within the first voltage island, the second voltage island having the same ~~hierarchal~~ hierarchical structure as the first voltage island.

[0017] For the purposes of the present invention VDDN is defined as a general power supply provided to a voltage island, VDDI is defined as a power supply present within the voltage island and distributed through a network to devices within the voltage island, VDDO is

defined as a power supply of the voltage islands parent terrain and VDDSS is defined as an optional power supply to support state-saving functions within the voltage island. A parent terrain is defined as the immediate physical region in which the voltage island is placed. A parent terrain may be the integrated circuit chip or another voltage island at some order of hierarchy of voltage islands with the integrated circuit chip. VDDG is defined as a power supply, which is always powered up whenever any of VDDN, VDDI, VDDO or VDDSS of a lower ~~hierarchal~~ hierarchical terrain is powered up. Fencing is defined shifting the voltage level of specified circuits from VDDI to VDDO when a voltage island is powered down and from VDDO to VDDI when a voltage island is powered up.

[0022] VDDN, VDDI, VDDO and VDDSS define all the different voltage sources required to power various functions within voltage islands. Therefore, VDDN, VDDI, VDDO and VDDSS are functional voltages. However, the voltage values of VDDN, VDDI, VDDO and VDDSS need not be different from one another and one or more of VDDN, VDDI, VDDO and VDDSS may be the same voltage value. Although FIG. 1 illustrates VDDSS and VDDN as being supplied from VDDO, this is not a general case and VDDSS and VDDN were so shown to indicate they must originate from some higher ~~hierarchal~~ hierarchical voltage supply. A full discussion of the ~~hierarchal~~ hierarchical voltage supplies of the present invention is illustrated in FIGs. 3 and 4 and described *infra*.

[0023] The minimum ~~hierarchal~~ hierarchical structure of every voltage island according to the present invention includes at least a VDDN power supply and voltage shifting means or fencing means or both voltage shifting means and fencing means. Additionally, every voltage

island according to the present invention may further include state saving means, one or more switch elements, a VDDI power supply and associated power distribution network, a VDDSS power supply, and one or more voltage buffering circuits. If a voltage island serves as a parent terrain for another, nested voltage island, then VDDI of the parent voltage island will be the VDDO of the nested voltage island. These elements are illustrated in FIG. 5 and discussed *infra*.